## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference B03/0225PC	FOR FURTHER ACTION	See item 4 below	
International application No. PCT/EP2004/008191	International filing date (day/month/year) 22 July 2004 (22.07.2004)	Priority date (day/month/year) 24 July 2003 (24.07.2003)	
International Patent Classification (8th See relevant information in Form F	n edition unless older edition indicated) PCT/ISA/237		
Applicant BASF AKTIENGESELLSCHAFT			

••	. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Scarching Authority under Rule 44 bis.1(a).				
2.	This REPORT consists of a to	otal of 5 sheets, including this cover sheet.			
	In the attached sheets, any reference to the written opinion of the International Scarching Authority should be read as a reference to the international proliminary report on patentability (Chapter I) instead.				
3.	This report contains indication	ns relating to the following items:			
	Box No. I	Basis of the report			
	Box No. II	Priority			
	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability			
	Box No. IV	Lack of unity of invention			
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
_	Box No. VI	. Cettain documents cited			
	Box No. VII	Certain defects in the international application			
	Box No. VIII	Certain observations on the international application			
4.	The International Bureau will not, except where the applican date (Rule 44his .2).	communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but a makes an express request under Article 23(2), before the expiration of 30 months from the priority			

29 May 2006 (29.05.2006)

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From	the RNATIONAL SEARCHING AUT	HORITY		
Го:				PCT PCT
				RITTEN OPINION OF THE TIONAL SEARCHING AUTHORITY
				(PCT Rule 43bis.1)
			Date of amiling (ckey/month/year)	
	cont's or agent's file reference 3/0225PC		FOR FURTHER ACTION  See paragraph 2 below	
Intern	national application No. T/EP2004/008191	International filing date 22,07,2004	(day/moraldyear)	Priority date (day/month/year) 24.07.2003
	ational Patent Classification (IPC) กะ	both national classification ar	d IPC	
Applio BA	cant SF AKTIENGESELLSO	CHAFT		
1. This opinion contains indications relating to the following items:				
Box No. I Basis of the opinion  Box No. II Principy				
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability			tive step and industrial applicability	
Box No. IV Lack of unity of invention				
	Box No. V Reasone applicab	ed statement under Rule 43bis. fility; citations and explanation	I(a)(i) with regard to is supporting such sta	novelty, inventive step or industrial tement
	1 I	documents cited		
	Box No. VII Certain	defects in the international app	olication	
	Box No. VIII Certain	observations on the internation	al application	
ż.	FURTHER ACTION	··· . —— ·· -		
	International Preliminary Examini	ng Authority ("IPFA") except the chosen IPFA has notified	that this does not any	Il he considered to be a written opinion of the ply where the applicant chooses an Authority other can under Rule 66. [bis(b) that written opinions of
If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA; written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.				of 3 months from the date of mailing of Form
3.	For further options, see Form PCT.  For further details, see notes to For			
Varre :	nd mailing address of the ISA/EP		Authorized -05	
			Authorized officer	
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Form PCT/ISA/237 (cover sheet) (January 2004)

	WRITTEN OPIN	YON OF THE	International application No.
	INTERNATIONAL SEAR	CHING AUTHORITY	PCT/EP2004/008191
Box No. 1	Basis of this opinion		
I. With re	gard to the language, this opinion han nless otherwise indicated under this it	is been established on the basis of the internation.	onal application in the language in which it wa
Г	his opinion has been established on th	e basis of a translation from the original langua	ge into the following language
		which is the language of a translation furnished	for the purposes of international search (under
R	ule 12.3 and 23.1(b)),		
2. With re- invention	gard to any nucleotide and/or omi n. this opinion has been established o	no acid sequence disclosed in the internation the basis of:	and application and necessary to the claimer
a. ty	o of material		
	a sequence listing		
	tuble(s) related to the sequence lis	ting	
b. foo	mat of material	•	
	in written format		
	in computer readable form		
c. tim	e of filing/furnishing		
	contained in the international appli	ication as filed.	
	1	I application in computer readable form.	
$\Box$	furnished subsequently to this Auti		
		one version or copy of a sequence listing and the information in the subsequent or additional control of the subsequent of additional control of the subsequent of the subsequ	or table(s) relating thereto has been filed or topies is identical to that in the application as
	l comments:		
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Form PCT/ISA/237 (Box No. 1) (January 2004)

WRITTEN OPINION OF THE	International application No.
INTERNATIONAL SEARCHING AUTHORITY	PCT/EP2004/008191
Box No. II Priority	
1. The following document has not yet been furnished:	
copy of the earlier application whose priority has been claimed (Rule 43his.)	144.7
translation of the carlier application whose priority has been claimed (Rule 4).  Consequently it has not been possible to consider the validity of the priority claim, the assumption that the relevant date in the claimed priority date.	3bis. 1 and 66.7(b)). This point on has powertheless have at the control of the c
- The first of pricery care.	
This opinion has been established as if no priority had been claimed due to the finder (Rules 43bis. I and 64.1). Thus for the purposes of this opinion, the international frelevant date.	act that the priority claim has been found invalid filing date indicated shove is considered to be the
Additional observations, if necessary;	
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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

Imernational application No.					
PCT/EP2004/0081	9:				

Box No. V Reasoned statement under I citations and explanations a		ut under Rule 43bls.i Analions supporting s	(a)(i) with regard to novelty, inventive step or industrial applicability: such statement	
ı.	Statement			
	Novelty (N)	Claims 1-14		YES
		Claims		NO
	Inventive step (18)	Claims 1-14		YES
		Claims		NO
	Industrial applicability (IA)	Claims 1-14		YES
		Claims		NO

Citations and explanations:

In the present opinion reference is made to the following document: D1: WO 00/55108 A (BASF AG; PINKOS ROLF (DE); FISCHER ROLF (DE))
21 September 2000 (2000-09-21)

The present application relates to a process for preparing  $\alpha,\beta$ -unsaturated acyclic or cyclic carbonyl compounds by dehydrogenating the corresponding saturated carbonyl compounds in the gas phase over a heterogeneous dehydrogenation catalyst, wherein the dehydrogenation catalyst comprises platinum and/or palladium and tin on an oxidic support.

Document D1, which discloses a process for preparing cyclic  $\alpha,\beta$ -unsaturated ketones, represents the closest prior art and is distinguished from the subject matter of the present claim 1 by the catalyst system not containing any tin.

The problem addressed by the present invention can therefore be considered to be provision of a further process for preparing  $\alpha,\beta$ -unsaturated acyclic or cyclic carbonyl compounds.

The solution is presented in claim 1 and concerns the specific tincontaining catalyst system. The use of a tin-containing catalyst system for the dehydrogenation of saturated carbonyl compounds to form the corresponding  $\alpha, \beta$ -unsaturated acyclic or cyclic carbonyl compounds is not made obvious to a person skilled in the art by the disclosure of D1.

Claims 2-14 are dependent on claim 1 and thus likewise meet the PCT requirements for novelty and inventive step.